



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,424	04/10/2006	Yang Peng	2003P00723WOUS	3752
24737	7590	08/10/2011		
PHILIPS INTELLECTUAL PROPERTY & STANDARDS				
P.O. BOX 3001				
BRIARCLIFF MANOR, NY 10510				
EXAMINER				
POPHAM, JEFFREY D				
ART UNIT		PAPER NUMBER		
2491				
NOTIFICATION DATE		DELIVERY MODE		
08/10/2011		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

vera.kublanov@philips.com

debbie.henn@philips.com

marianne.fox@philips.com

### Office Action Summary

**Application No.**

10/575,424

**Applicant(s)**

PENG ET AL.

**Examiner**

JEFFREY D. POPHAM

**Art Unit**

2491

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 June 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsman's Patent Drawing Review (PTO-945)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Remarks***

Claims 17-32 are pending.

***Response to Arguments***

1. Applicant's arguments filed 6/6/2011 have been fully considered but they are not persuasive.

Applicant argues that Kambayashi does not teach that both internal media content and a public key are provided on the same optical disk. As discussed in the rejection, Kambayashi does not teach the public key being provided on the optical disk, but does discuss the internal media content being provided on an optical disk. The teachings of Uranaka with respect to the public key being provided on the optical disk will be discussed below.

Applicant also argues that Kambayashi does not teach "an output portion to output the internal media content in coordination with the associated downloaded authenticated external media content". However, Applicant does not describe why Applicant believes this to be the case. Kambayashi clearly teaches downloading ENAV/V-click content from a server, such ENAV/V-click content corresponding to the content stored on the optical disk. Kambayashi will then authenticate the downloaded ENAV/V-click content and, if authenticated, will process the ENAV/V-click content along with the disk-stored content play/output the disk-stored content along with (or as processed by) the ENAV/V-click content. This can be seen, for example, in figure 1 and paragraph 50 of Kambayashi, showing that "AV renderer 31 receives decoded data from the

Art Unit: 2491

playback engine 2. Further, the AV renderer 31 receives, from the element decoder 32, element data including video data and audio data generated based on ENAV contents 101." Paragraph 51 describes how AV renderer combines the DVD content and the ENAV contents in order to display such combined (or overlaid) contents. Therefore, Kambayashi does teach an output portion (e.g. AV renderer) to output the internal media content (e.g. DVD contents) with the associated downloaded authenticated external media content (e.g. ENAV contents).

Applicant argues that the public key described in Uranaka is not used for authenticating external media content and, therefore, Uranaka does not disclose "an optical disk driver unit to read-out internal media content and a public key, both provided on the same optical disk, the public key is for authenticating external media content associated with the internal media content" or "an output portion to output the internal media content in coordination with the associated downloaded authenticated external media content". As just described, Kambayashi already teaches the latter limitation. Furthermore, Kambayashi teaches "A public key which is used for authenticating external media content having an added private key", which has not been argued. All that is missing from Kambayashi is the public key being read from the optical disk. Uranaka clearly teaches that the public key is read from the optical disk, for example, in column 8, lines 38-41, referring to "associating the sever public key (PK<sub>s</sub>) contained in the distribution descriptor 23 recorded in the burst cutting area of the DVD with the ID and the network address." Furthermore, column 12, lines 14-15

refers to a "server public key read out from the distribution descriptor 23 recorded in the burst cutting area of the DVD". Therefore, Uranaka clearly describes that which is missing from Kambayashi, in particular, "that the public key is read from the optical disk." Since Kambayashi already teaches using the public key to authenticate external media content that is encrypted with the private key, this redundant teaching need not be within Uranaka as well.

Applicant finally argues that Kambayashi in view of Uranaka does not teach the entirety of claim 20, without providing any specific arguments. Due to what Applicant has highlighted in this block copy of claim 20, the above responses to Applicant's arguments are deemed sufficient.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 17-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 20, for example, states "each external media content having a private key". However, claim 20 also refers to "a control system to verify the authenticity of the downloaded external media content using the public key read out from the optical disk". Therefore, since this downloaded content is verified via the public key, then this verification comprises decrypting data that was encrypted via the private key. This is how it appears in the application as

Art Unit: 2491

originally filed and how one of ordinary skill in the art would construe these limitations. Therefore, "each external media content having a private key" has been construed as "each external media content having been encrypted with a private key". As it stands, it appears as though claim 20 is stating that a private key is merely sent along with the content, which would result in the inability to verify the authenticity of the external media content using the public key. The other independent claims have the same issue and are rejected for the same reasons. The dependent claims are also rejected for the same reasons.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 17, 18, 20, 22, 24, 25, 27-29, 31, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kambayashi (U.S. Patent Application Publication 2004/0001697) in view of Uranaka (U.S. Patent 6,470,085).

Regarding Claim 20,

Kambayashi discloses an optical disk player comprising:

An optical disk driver unit to read out internal media content

(Figures 1 and 18; and Paragraph 47)

A public key which is used for authenticating external media content associated with the internal media content (Figures 21-22; and Paragraphs 216-221 and 231-244);

A network interface to download one or more external media content, each external media content having a private key and is provided on one or more computing devices distributed on a network (Figures 1, 18, and 21-22; and Paragraphs 205, 209, 212, 216, 240, and 246);

A control system to verify the authenticity of the downloaded external media content using the public key (Figures 21-22; and Paragraphs 216-221 and 231-244); and

An output portion to output the internal media content in coordination with the associated downloaded authenticated external media content (Figures 21-22; and Paragraphs 44, 50-54, 216-221 and 231-244);

Wherein the authenticity of the external media content is verified independent of the authenticity of the one or more computing devices on which the external media content is provided (Figures 21-22; and Paragraphs 216-221 and 231-244);

But does not explicitly disclose that the public key is provided on and read from the same optical disk as the internal content.

Uranaka, however, discloses that the public key is provided on and read from the same optical disk as the internal content (Column 6, lines 42054; Column 7, lines 9-33; Column 8, lines 23-41; and Column 12, lines 12-15). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the content usage control system of Uranaka into the enhanced content reproduction system of Kambayashi in order to ensure that a user has been given an appropriate public key by sending it on the disk along with the content, and/or to allow the system to restrict content access to those devices that a server deems authorized to do so.

Regarding Claim 17,

Claim 17 is a system claim that is broader than player claim 20 and is rejected for the same reasons.

Regarding Claim 25,

Claim 25 is a method claim that is broader than player claim 20 and is rejected for the same reasons.

Regarding Claim 22,

Kambayashi as modified by Uranaka discloses the player of claim 20, in addition, Kambayashi discloses that the downloaded external media content is an application program (Paragraph 220, script in ENAV contents, for example).

Regarding Claim 29,



Claim 28 is a method claim that is broader than player claim 29 and is rejected for the same reasons.

Regarding Claim 24,

Kambayashi as modified by Uranaka discloses the player of claim 20, in addition, Kambayashi discloses that the control system verifies the authenticity of the downloaded external media content by performing asymmetric cryptography using the public key stored on the optical disk corresponding to the private key of the downloaded external media content (Figures 2—22; Paragraphs 216-221 and 231-244).

Regarding Claim 31,

Claim 31 is a method claim that is broader than player claim 24 and is rejected for the same reasons.

Regarding Claim 18,

Kambayashi as modified by Uranaka discloses the system of claim 17, in addition, Uranaka discloses that the public key is stored in a BCA zone of the optical disk (Figures 2 and 4; Column 5, lines 20-42; Column 5, line 58 to Column 6, line 5; and Column 8, lines 34-41).

Regarding Claim 27,

Kambayashi as modified by Uranaka discloses the method of claim 25, in addition, Kambayashi discloses that the coordination between the read out internal media content and the downloaded

external media content will not be established if the downloaded external media content is not authenticated (Figures 21-22; and Paragraph 234).

Regarding Claim 28,

Kambayashi as modified by Uranaka discloses the method of claim 27, in addition, Kambayashi discloses that the coordination between the read out internal media content and downloaded external media content will be established if the downloaded external media content is authenticated (Figure 21; and Paragraph 234).

Regarding Claim 32,

Kambayashi as modified by Uranaka discloses the method of claim 25, in addition, Kambayashi discloses that the optical disk comprises digital information stored thereon, the stored digital information comprising network address information that is used to download the external media content (Paragraph 209); and Uranaka discloses that the optical disk comprises the public key that is used to verify the authenticity of the downloaded external media content before playing the internal media content in coordination with the external media content (Figures 2 and 4; Column 5, lines 20-42; Column 5, line 58 to Column 6, line 5; and Column 15, lines 57-67).

Art Unit: 2491

4. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kambayashi in view of Uranaka, further in view of Ryan (U.S. Patent 5,754,648).

Kambayashi as modified by Uranaka does not explicitly disclose that the public key is stored in a media content zone of the optical disk.

Ryan, however, discloses that the public key is stored in a media content zone of the optical disk (Column 3, lines 47-67; and Column 8, lines 31-37). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the media security and tracking system of Ryan into the enhanced content reproduction system of Kambayashi as modified by Uranaka in order to allow the system to provide additional authentication and authorization steps such that a device can ensure that both the disk and device are authentic and authorized for use with each other by using data stored on the optical disk itself and data stored on a magnetic track attached to the disk, thus decreasing the chance of unauthorized use thereof, and/or to provide the ability to track use of the media.

5. Claims 21 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kambayashi in view of Uranaka, further in view of Collins (U.S. Patent Application Publication 2002/0073316).

Regarding Claim 21,

Kambayashi as modified by Uranaka does not explicitly disclose that the control system detects whether the downloaded

external media content is integral before verification, wherein the verification will not be executed if the downloaded external media content is detected to not be integral.

Collins, however, discloses that the control system detects whether the downloaded external media content is integral before verification, wherein the verification will not be executed if the downloaded external media content is detected to not be integral (Paragraphs 73-77; detecting whether the downloaded content is "integral" may comprise either, or both, verification of the program packet format and/or verification of the checksum, each of which must succeed before signature verification is performed). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the content authentication and access control system of Collins into the enhanced content reproduction system of Kambayashi as modified by Uranaka in order to allow the system to detect when errors in the data have occurred, such that data with errors will not be allowed to be processed and only correct data will be processed, and/or to ensure that the data is proper and authentic before allowing access to proceed, thereby increasing security of the system by ensuring both integrity and authenticity of the content.

Regarding Claim 26,

Claim 26 is a method claim that is broader than player claim 21 and is rejected for the same reasons.

6. Claims 23 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kambayashi in view of Uranaka, further in view of Tsumagari (U.S. Patent Application Publication 2004/0126095).

Regarding Claim 23,

Kambayashi as modified by Uranaka does not explicitly disclose that the application program is a JAVA language application program.

Tsumagari, however, discloses that the application program is a JAVA language application program (Figure 10; and Paragraphs 143 and 167). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the script execution system of Tsumagari into the enhanced content reproduction system of Kambayashi as modified by Uranaka in order to allow the system to work with various kinds of well-known languages, thereby allowing additional flexibility in the creation of ENAV contents as well as allowing a broader range of devices to take advantage of the ENAV contents.

Regarding Claim 30,

Claim 30 is a method claim that is broader than player claim 23 and is rejected for the same reasons.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY D. POPHAM whose telephone number is (571)272-7215. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ashok Patel can be reached on (571)272-3972. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2491

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JEFFREY D POPHAM  
Primary Examiner  
Art Unit 2491

/JEFFREY D POPHAM/  
Primary Examiner, Art Unit 2491